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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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PANOS, JEFFREY C

ART UNIT	PAPER NUMBER
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3713

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/659,331	<b>Applicant(s)</b> BOSCHA ET AL.	
	<b>Examiner</b> Jeffrey C. Panos	<b>Art Unit</b> 3713	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

The Examiner spoke with the Applicant and obtained authorization to charge fees for two more claims to their account. These fees are due to claims 31 and 32 from submittal September 11, 2003 not being present with any status in the submission of claims on August 19, 2005, and since new claims were added on August 19, 2005 the eight new claims filed continued with claim number 31 improperly, where claims 31 and 32 were not the same claims 31 and 32 submitted on September 11, 2003. Therefore, there were eight new claims, not six new claims as was charged. The correction has been made.

### ***Specification***

The disclosure is objected to because of the following minor informalities:

Page 3 of the Specification contains a list of U.S. Patents in the third paragraph, where the first patent number in line 1 is in error. The other error in the same paragraph and same line contains a grammatical error. Line 1 reads, "The other solution disclosed in U.S. patents nos. 2,416, 0942," where the errors are underlined. The word "patents" should be "patent" because the abbreviation "nos." already gives the plurality in grammar. The patent number itself should only be 7 digits.

Appropriate correction is required.

***Claim Objections***

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 31-38 must be renumbered 33-40, respectively, in order to be in compliance. Applicant is required to correct the number for the newly presented claims of the Preliminary Amendment filed on August 19, 2005 accordingly. Note also, claim 18 should be dependent from claim 16 instead of claim 10. Correction is required. As a reminder to the Applicant, please change all dependent claims accordingly. Further note that the Examiner has changed the 'new' claims accordingly for this Office Action; claims 31-38 are renumbered 33-40.

Applicant must submit a new claims sheet with the appropriate claim numbers and claim statuses as a response to this Office Action within the time period of three months from the mailing date of this Office Action.

Claims 1, 5, 6, 7, 16, 21, and 22 are objected to because of the following informalities:

Regarding claims 1 and 16, lines 2 and 3 contain typographical errors with the words "puts" and "put" when the Examiner interprets this to be "putts" and "put". Lines 2

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and 3 read "...into which a golfer puts balls; an initial putter with which the golfer hits the balls so as to put the balls..."

Regarding claim 5, the Examiner believes there is a typographical error within the last line. The last line of claim 5 reads as "...part of a said computing means." The Examiner interprets there should be no word "a" in the last line.

Regarding claims 6 and 21, line 2 contains a typographical error. Line 2 reads as "...display unit is formed so as to display an information." The Examiner interprets this to be "any."

Regarding claims 7 and 22, line 3 contains a typographical error in that there is a word missing. Line 3 reads as "...group consisting save, recall, and replay." The Examiner interprets this to read as, "...group consisting of save, recall, and replay."

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9-12, 16-21, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuer et al (US 2002/0077189 A1) in view of Cameron et al (US Patent No. 6,595,448 B2).

Regarding claims 1 and 16, Tuer et al teaches a sensing means for sensing parameters of the initial putter during hitting the balls by the golfer to putt the balls into the hole (¶0025); data collecting and processing means for collecting and processing data corresponding to said sensed parameters (¶0025; ¶0027: 2-4; ¶0031); transmitting means for transmitting said data corresponding to the sensed parameters (¶0033: 10-16); and computing means for receiving and processing said data (¶0025; ¶0031). Cameron et al teaches a putting surface 16 with at least one hole 14 into which a golfer putts a ball (Figure 2) and an initial putter 18 with which the golfer hits the balls (Abstract). Tuer et al lacks in specifically disclosing design and manufacturing means from the determination of the final parameters of a personal putter. Cameron et al teaches the use of such data to customize a club accordingly (col. 11: 60-67; col. 12: 1-4). Further, it is inherent that the personal putter is manufactured in Cameron et al's invention because it states that the putter will be customized to the design parameters (lie angle, etc.) and that the new putter can be used again for analysis (col. 12: 5-13) as the specification explains in whole. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the putter used to gain all the right parameters for manufacture by providing the ending customization of the club taught by Cameron et al so that there would be a second determination that the personal putter's parameters were in fact correct.

Regarding claims 2 and 17, Tuer et al teaches a computing means formed as a computer, which is remote from said putting surface, and said initial putter (¶0034: 9-20).

Regarding claims 3 and 18, Tuer et al teaches wherein said data collecting and processing means using a microcontroller connected with electrical signals amplifying means and collecting data from said sensing means to configure said data.

Microcontrollers and microprocessors are terms used that can be used interchangeably. Microcontrollers are just a general-purpose microprocessor. So it is inherent that in this case the microcontroller is synonymous with a microprocessor.

Regarding claims 4 and 19, Tuer et al teaches wherein said computing means is selected from the group consisting of a remote receiving computer, a pocket personal computer with compatible signal receiving means, and a laptop computer with wireless receiving means (§§0033: 10-16; §0034: 9-11).

Regarding claims 5 and 20, Tuer et al teaches the further comprising of a display unit selected from the group consisting of a display unit connected to said computing means and a display unit formed as an integral part of said computing means (§§0033; §0034).

Regarding claims 6 and 21, Tuer et al teaches wherein display unit is formed so as to display any information selected from the group consisting of a position of a putter head, position of a putter head, lie and loft angles with text identifying a deviation in degrees, a putter path during a swing (§0038: 4), an acceleration and a deceleration of a putter head alongside of a putter path, a text message with details related to a swing in real time, in combinations thereof (§0025; §0033 and 0034; Abstract).

Regarding claims 9 and 24, Tuer et al teaches transmitting means to transmit information such as lie and loft angles, a putter face angle, a shaft lie angle, and an offset position (§§0025 and 0031).

Regarding claims 10 and 25, Tuer et al teaches the putter having a handle and a head, said sensing means including acceleration/deceleration measuring means, one part of putter path measuring means, and rotation measuring means located in said head, and also including lie/loft angles measuring means and another part of the putter path measuring means located in said handle (§§0025; 0026; §§0038: 4).

Regarding claims 11 and 26, Tuer et al teaches a system wherein said data collecting and processing means and said transmitting means are located in said handle (§§0026 and 29).

Regarding claims 12 and 27, Tuer et al teaches a club with sensing means, data collecting and processing means, and transmitting means (§§0025, 0031, 0033, 0034), but lacks in specifically disclosing that the club is for training. However, it is obvious to one skilled in the art that this invention is indeed for training by the obtaining of data relating to the swing of the golfer and displaying this data for the sole purpose of alerting the user of errors and the sources of those errors, therefore this is a training golf club.

Claims 7, 8, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuer et al (US 2002/0077189 A1) in view of Cameron et al (US Patent No. 6,595,448 B2) and in further view of McNitt et al (US Patent No. 6,567,536 B2).



Regarding claims 7 and 22, Tuer et al describes a graphical user interface, but does not disclose a display provided with radio buttons for computer commands selected from the group consisting of save, recall, and replay. However, this is taught by McNitt et al through the use of a graphical user interface that contains controls that play, fast forward, reverse and stop. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use these controls because they are controlled by computer commands and would work efficiently with the system containing the electronics package taught by Tuer et al, which sends the information to a graphical user interface already (§§0033 and 0034).

Regarding claims 8 and 23, Tuer et al teaches display devices being able to receive wireless information (§§0033 and 0034) and it is commonly known that many computing devices today are capable of communicating wirelessly in a variety of ways, including portable devices such as PDAs, Palm Pilots, Laptops, cellular phones, etc. that are built with integrated wireless systems connectable to the internet. However, McNitt et al teaches motion analysis and sending this information over the Internet, or more specifically uploading it to a web server by Internet connection for analysis (col. 21: 65-67; col. 22: 1-19; col. 23: 14-24), thus is obvious to one skilled in the art at the time the invention is made.

Claims 13-15 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuer et al (US 2002/0077189 A1) in view of Cameron et al (US Patent No. 6,595,448 B2) and in further view of Buhler (US Patent No. 6,565,449 B2).

Regarding claims 13 and 28, Tuer et al lacks in specifically disclosing that it contains buttons or switches actuatable by a user and switching operation of electronic system of said initial putter between a plurality of modes. Tuer et al teaches several different modes such as initializing, resetting, and controlling of the sensor suites (§0027); but much more specifically shown is in that of Buhler where there is also an initialization and reset mode for the system, a monitoring mode, and then when a button is pressed (or actuated) for a period of time a different mode is entered such as a clearing mode of all information, which is done before returning to the monitoring mode (col. 4: 58-59; col. 5: 25-36). As previously mentioned, the initial putter is taught by Cameron et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to interpret reset, initialize, monitor, etc. as modes of operation for the electronics systems given that a mode of operation is the condition of functioning or status the system is or would be in.

Regarding claims 14 and 29, Tuer et al teaches a display device for displaying to the user data that the sensors have obtained and this display device is more than capable of displaying each mode of operation using the same routines as for displaying any other text (§0033 and 0034). Tuer et al lacks in specifically disclosing that it contains indicating means operative for visually indicating the modes to which the electronic system of said initial putter is switched. Tuer et al teaches several different modes such as initializing, resetting, and controlling of the sensor suites (§0027); but much more specifically shown is in that of Buhler where there is also an initialization and reset mode for the system, a monitoring mode, and then when a button is pressed

(or actuated) for a period of time a different mode is entered such as a clearing mode of all information, which is done before returning to the monitoring mode (col. 4: 58-59; col. 5: 25-36). As previously mentioned, the initial putter is taught by Cameron et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to interpret reset, initialize, monitor, etc. as modes of operation for the electronics systems given that a mode of operation is the condition of functioning or status the system is or would be in; and further to use the display device taught by Tuer et al for displaying the modes of operation so that the user is well informed as to what the electronics are currently doing.

Regarding claims 15 and 30, Tuer et al teaches an sound interface for communicating to the user and is more than capable of indicating each mode of operation using the same routines as for any sound (Abstract). Tuer et al lacks in specifically disclosing that it contains indicating means operative for visually indicating the modes to which the electronic system of said initial putter is switched. Tuer et al teaches several different modes such as initializing, resetting, and controlling of the sensor suites (§0027); but much more specifically shown is in that of Buhler where there is also an initialization and reset mode for the system, a monitoring mode, and then when a button is pressed (or actuated) for a period of time a different mode is entered such as a clearing mode of all information, which is done before returning to the monitoring mode (col. 4: 58-59; col. 5: 25-36). As previously mentioned, the initial putter is taught by Cameron et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to interpret reset, initialize, monitor, etc. as

modes of operation for the electronics systems given that a mode of operation is the condition of functioning or status the system is or would be in; and further to use the sound device taught by Tuer et al for indicating the modes of operation in the case the display is remotely located and for the user to be aware of when they may begin to swing the club.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 33-40 rejected under 35 U.S.C. 102(a) as being anticipated by Tuer et al (US 2002/0077189 A1).

Regarding claim 33, Tuer et al teaches a golf club (where a golf club can be a putter) the comprises a handle, a head (¶0026); sensing means for sensing parameters selected from the group consisting of acceleration measuring means, deceleration measuring means, putter path measuring means (¶0038: 4), rotation measuring means, lie angle measuring means, loft angle measuring means and combinations thereof (¶0025).

Regarding claim 34, Tuer et al teaches a golf club (where a golf club can be a putter), wherein said acceleration measuring means, said deceleration measuring means, one part of said path measuring means, and said rotation measuring means are

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located in said head (¶0025 and 0026); while said lie angle measuring means, said loft angle measuring means can also be located in said handle (¶0025). Tuer et al discloses there is a measurement of position of the club located in the handle, and since one type of club is a putter, then it is inherent that the system measures the putter path (¶0025: 2-6; ¶0038: 4).

Regarding claim 35, Tuer et al teaches a golf club comprising means for transmitting data sensed by said sensing means (¶0033).

Regarding claims 36 and 40, Tuer et al teaches that the electronics package includes the transmitting means and is located in said handle (¶0027, 0028, 0029, 0033).

Regarding claims 37 and 39, Tuer et al teaches a system comprising a putter having a handle, a head (¶0026), and sensing means selected from the group consisting of acceleration measuring means, deceleration measuring means (¶0025), putter path measuring means (¶0038: 4), rotation measuring means, lie angle measuring means, a loft angle measuring means (¶0025), and combinations thereof; means for transmitting data measured by said measuring means (¶0033); computing means for receiving and processing of measured data (¶¶0027, 0028, 0031, 0034); and display means for displaying the processed data so that a golf player can analyze his performance (¶0034).

Regarding claim 36, Tuer et al teaches a system wherein said putter (type of golf club) has means for transmitting the measured data from the putter to the computing means (¶0033, 0034).

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,540,620 B1 teaches a putter training device with a processor for judging the speed of impact of a golf club head on a golf ball.

US Patent No. 6,042,438 teaches a method of measuring motion of a golf ball and collecting parameters.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Panos whose telephone number is (571) 272-6136. The examiner can normally be reached on M-F 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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TC3702